

# PATENT SPECIFICATION

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## DRAWINGS ATTACHED

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## (54) MOTOR VEHICLE WITH HANDBRAKE LEVER MOUNTED THEREON

(71) We, VAUXHALL MOTORS LIMITED, a British Company of Luton, Bedfordshire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to motor vehicles having a handbrake lever mounted thereon.

A motor vehicle according to the invention has a handbrake lever pivotally mounted on the floor and/or transmission tunnel of the vehicle, in which the lever is pivotable about a substantially horizontal axis between a brake release position and a brake operating position, and is mounted in such a position relative to the front seat mounting that the lever abuts or nearly abuts, when in a substantially upright position, the front of the seat cushion when the seat is in its furthest forward adjusted position on its mounting; and the lever has a handle portion which is inclined relative to the remainder of the lever so that it extends at least partly around the front of the seat cushion, in its furthest forward position, when the lever is in the substantially upright position.

In the case of a front-engine vehicle having rear wheel drive, the lever may be mounted on the transmission tunnel of the vehicle, for example on a side wall of the tunnel.

It is preferred that the handle portion of the lever should include a Tee-piece for easy operation of the lever by the driver. Moreover, a push-button may be slidably mounted within one arm of the Tee-piece to operate a handbrake release mechanism.

Depending on the relative locations of the furthest forward position of the front seat and the pivotal mounting of the handbrake lever, the handle portion may be inclined rearwardly of the remainder of the lever when the latter is substantially upright.

The invention will now be particularly described with reference to the accompanying drawings, in which:

Figure 1 is a side elevational view of a floor mounted handbrake lever in a motor vehicle;

Figure 2 is a detail view of the handle at one end of the lever;

Figure 3 is a side view of the handle; and

Figure 4 is a detail view of an alternative construction of handle.

Referring now to Figure 1 of the drawings, there is shown a floor mounted handbrake lever 1 which is mounted for pivotal movement about a substantially horizontal axis 2. An arcuate ratchet plate 3 is fixedly mounted on the floor 4 of the motor vehicle body and has ratchet teeth 5 with which a pawl mechanism of the handbrake lever 1 can co-operate.

The pawl mechanism of the handbrake lever 1 includes a pawl 6 which is mounted for pivotal movement relative to the handbrake lever 1 about an axis 7. The operating mechanism for the pawl 6 includes a reciprocatory rod 8 which is operable by a push-button in the handle of the handbrake lever 1, the push-button mechanism being shown in more detail in Figure 2.

The handle portion of the handbrake lever includes a Tee-piece handle 9 which is fitted over the upper end of the lever 1. The handle 9 is formed by die-casting or plastics moulding and, as shown in Figure 2, it is screwed on to the upper end of lever 1 and is locked by a nut 10. In the case of the handle 9 being a plastics moulding, an internally threaded metal insert 11 is used.

As mentioned above, the rod 8 is mounted for reciprocatory movement and, to this end, its upper end 12 is secured, by pin 13, to a member 14 slidably mounted in the upper end of lever 1. A compression spring 15 acts between an annular plate 16 located in the outer casing of the lever 1 and the lower end of slidable member 14. Therefore, spring 15 acts so as to urge slidable member 14 upwardly and outwardly relative to the casing of handbrake lever 1.

The upper or outer end 17 of slidable member 14 is rounded and engages in a cam surface 18 of a push-button 19. The push-button 19 is mounted for slidable movement within the handle 9 and is normally urged to the right as seen in Figure

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scribed with reference to, and as shown in  
Figures 1 to 3 as modified by the construction  
of Figure 4 of the accompanying drawings.

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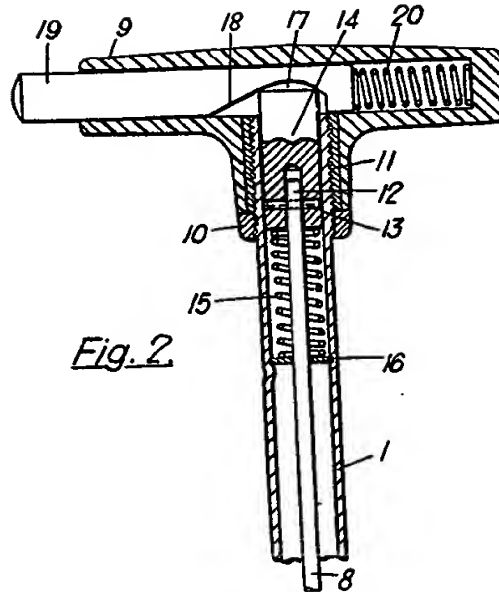
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COMPLETE SPECIFICATION

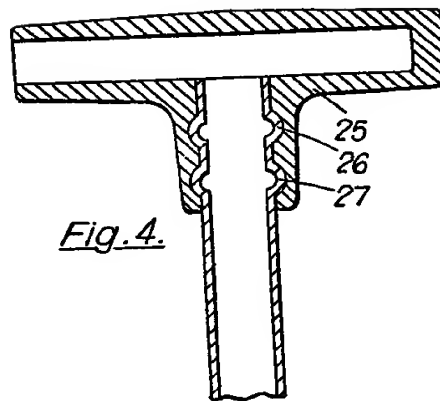
2 SHEETS

This drawing is a reproduction of  
the Original on a reduced scale

Sheet 2



*Fig. 2.*



*Fig. 4.*

*Fig. 3.*

